

# SIX NON-NATIVE SPECIES NEWLY DISCOVERED IN THE IOWA VASCULAR FLORA

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With the continuing invasion of indigenous floras by non-native elements, it is important to document early appearances of alien species. This paper focuses on six species that have appeared in the Iowa vascular flora in recent years. Two species were first noted in 1976 and 1981, the remainder in 2000. None of these species are included in the checklist of Iowa vascular plants by Eilers and Roosa (1994). Single populations of two species were first reported in Norris et al. (2001). This paper documents additional populations. Although these species are not widespread as yet in the state, there probably is no barrier to their spread. Most are weeds of ornamental plantings and are spread primarily via horticultural materials. Most previous studies of horticultural introductions have focused on the spread of woody landscape plants (Vincent & Cusick 1998). The present work concerns the incidental introduction of herbaceous species. One shrub discussed below, *Tamarix parviflora* DC., potentially is a serious pest species, however. Careful searching should yield additional Iowa populations of all six species.

Specimen citations are abbreviated and full details are available from the author.

**Anethum graveolens** L. (APIACEAE). Culinary dill is a sporadic waif in North America. Apparently, this is the first report of this herb in the Iowa flora.

**Des Moines Co.:** bank of Mississippi River, US Hwy. 34 bridge, Burlington, 15 Jul 2000, *Cusick 35548* (ISC, MICH).

**Fatoua villosa** (Thunb.) Nakai (MORACEAE). Mulberry-weed is an annual species from Asia which now is common throughout the southeastern United States. It typically grows in nurseries and amid ornamental plantings. It also is a common adventive in greenhouses. The Iowa population is a northwestern range extension from southern Missouri and central Ohio (Wunderlin 1997). In the north, *Fatoua villosa* is restricted to protected situations, such as walls and south-facing slopes. The climate at the Muscatine County site is moderated by the nearby Mississippi River. Mulberry-weed likely will be found at other places along the river in southern Iowa.

**Muscatine Co.:** nursery on terrace of Mississippi River, St. Hwy. 22, Muscatine, 21 Jul 2000, *Cusick* 35602 (ISC, MICH, MU, OSH).

***Oxalis corniculata* L.** (OXALIDACEAE). This species is adventive from tropical America. In the southern U.S., it is widespread in ornamental plantings. It is common in greenhouses as well (Lourteig 1979). As with *Fatoua villosa*, it apparently spreads as a contaminant with potted ornamentals, based upon the author's personal observations of nursery material.

**Black Hawk Co.:** lawn, Gilchrist Hall, University of Northern Iowa campus, 1 Apr 1981, *T. Lammers* 4028 (ISC). **Muscatine Co.:** nursery on terrace of Mississippi River, St. Hwy. 22, Muscatine, 21 Jul 2000, *Cusick* 35603 (ISC).

***Sagina procumbens* L.** (CARYOPHYLLACEAE). European pearlwort was first reported in Iowa from Story County where it was discovered in 2000 (Norris et al. 2001). It is common throughout the northeastern and northwestern U.S., but sporadic in Midwestern states. This perennial species typically grows in crevices in walls and sidewalks and as a weed in ornamental plantings. The similar annual, *Sagina decumbens* (Ell.) T.&G., grows in comparable situations and occurs near Iowa in northcentral Illinois (Crow 1978).

**Cerro Gordo Co.:** garden store, 4th St. SW & S Polk Ave., Mason City, 19 Jul 2000, *Cusick* 35588 (ISC); **Muscatine Co.:** nursery on terrace of Mississippi River, St. Hwy. 22, Muscatine, 21 Jul 2000, *Cusick* 35601 (ISC).

***Tamarix parviflora* DC.** (TAMARICACEAE). Salt cedar is a widespread invasive species of riparian corridors throughout the western United States. It is a serious pest, often forming a monoculture that reduces natural biodiversity (Weisenborn 1996). The plants are isolated at the Des Moines County station, with no planted material nearby. Its presence in the Iowa flora should be closely monitored. Extirpation of the shrubs at the single known site probably is warranted.

**Des Moines Co.:** two tall shrubs, edge of pond, Sullivan Slough Rd., S of Burlington, 15 Jul 2000, *Cusick* 35555 (ISC, MICH).

***Viola arvensis* Murray** (VIOLACEAE). A single previous collection of European field pansy from Story County, Iowa in 1998 has been reported (Norris et al. 2001). Unlike most violets, this is an annual species that may bloom in any month of the growing season.

**Cerro Gordo Co.:** nursery, St. Hwy. 122, Mason City, 17 Jul 2000, *Cusick* 35585 (ISC). **Des Moines Co.:** flowerbed, 1326 Griswold St, Burlington, 4 Jul 1976, *T. Lammers* 876 (ISC).

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